For a valid claim to priority, the priority application must convey to a person of ordinary skill that the inventor(s) had invented or had possession of the claimed invention as of the claimed priority date. Hence, the priority application must be examined to ascertain if it supports, within the meaning of section 112, ¶ 1, what is described in the subsequent United States application (*In re Gosteli*, 872 F.2d 1008 (Fed. Cir. 1989)). The test is whether the disclosure of the priority application as filed *reasonably conveys* to the artisan that the inventor had possession at that time of the later submitted subject matter, and not just whether there is the presence or absence of literal support in the specification (*In re Kaslow*, 707 F.2d 1366, 217 USPQ 1089 (Fed. Cir. 1983)). The specification must be enabling as of the claimed priority date, and must teach those of ordinary skill how to make and use the full scope of the claimed invention without undue experimentation (*Hybritech v. Monoclonal Antibodies,* 802 F.2d 1367 (Fed. Cir. 1986)).

Furthermore, in *Ariad Pharmaceuticals Inc. v. Eli Lilly and Co.*, the U.S. Court of Appeals for the Federal Circuit issued an en banc decision upholding an earlier ruling that patent applications must contain a specific "written description" of the claimed invention in addition to enabling language explaining how to make and use the invention.

A deciding issue in the October 29, 2010 BPAI decision was:

For their part, the Appellants do not address the Examiner's reliance on paragraphs 15 and 26 of the reference. Instead, they merely allege that "no learning of VLAN membership of an endstation to its connecting switch is disclosed or suggested by Goodwin." (App. Br. 6.)

Their allegation does not persuade us of error in the Examiner's findings. Therefore, we conclude that the Examiner did not err in finding that the combined teachings of Jain, Walker, and Goodwin would have suggested "learning a correspondence between said CE interface and each VLAN identifier included in said at least one tagged frame" as recited in claim 20. Page 6, first issue.

In particular the BPAI cites the Examiner in this regard:

One of ordinary skill in the art [would have understood that] [s]ource learning learns the VLAN information from all unknown packets, not just packets originating from WAN side of the switch, rather would learn the correspondences from the LAN side as well (i.e. switch 1 102 would learn the VLAN correspondences from endstations 108-112 using the "source learning" function of the switch. This clearly demonstrates that Goodwin learns the correspondences between CE devices and VLAN s .... Sentence bridging page 5 and 6.

Applicant has argued in the Appeal Brief that:

But, according to Goodwin, the distant switch connecting the distant endstation knows that this distant endstation belongs to VLAN 10, as it is contained in its database from the beginning (paragraph [0044] or paragraph [0049]). This provisioning may be entered manually, for instance.

Thus, the learning by Goodwin only relates to VLAN membership propagated over the backbone. But a switch always knows the VLAN membership of the endstations connected to it. In other words, no learning of VLAN membership of an endstation to its connecting switch is disclosed or suggested by Goodwin. Page 6, fourth and fifth paragraph.

With reference to learning of VLAN membership of an endstation to its connecting switch, the present application states in the paragraph bridging pages 9 and 10, which is paragraph [0055] in the published specification:

[0055] When the frame is received at a local CE port (yes in tests 30 and 31), the corresponding VPN-id is retrieved in step 32 based on the configuration of the port number, and the VLAN identifier is read in the tag header of the frame in step 33. If table T contains no other local port number and no VC label for forwarding the frame (no in tests 34 and 35), then the frame is propagated to all the other PE devices in step 36 by pushing the

labels of the flooding LSPs previously established. In this step 36, the frame is also propagated to any other local CE port of the PE device which has been configured for the VPN-id retrieved in step 32. The PE device also allocates a VC label to the (VPN-id, VID) pair in view of the reception of frames through the carrier network, and stores it in table T (step 37). In step 38, the allocated VC label is sent, along with VPN-id and VID, to all the other PEs configured for the VPN. This can be done by means of a LDP message (see the Internet Draft "draft-martini-l2circuit-trans-mpis-07.txt"). An entry is created in table T in step 39 to learn the relationship between the CE port number and the (VPN-id, VID) pair. The PE device can then wait for the next Ethernet frame (return to test 30).

Applicants refer particularly to:

In this step 36, the frame is also propagated to any other local CE port of the PE device which has been configured for the VPN-id retrieved in step 32.

It is this step which learns the VLAN membership of an endstation to its connecting switch. This is to be distinguished from learning the information from other switches, e.g. via the backbone.

It is the Applicant's considered opinion that Goodwin only discloses learning VLAN membership propagated over the backbone. Both the Examiner and the BPAI argue that the patent application of Goodwin discloses more than this and in fact discloses that also the VLAN membership of an endstation to its connecting switch is learned.

The provisional application from which Goodwin claim priority (60/256,829) makes certain statements that have some similarity to the later filed US regular application. For example:

Membership in VLANs is determined by applying policy to specific traffic, and the policies are configured. VLAN membership is detected by a function within the switch called Source Learning. Source Learning applies the VLAN policies during processing of all

unknown unicast, broadcast, and multicast frames. Page 1, second paragraph, of 60/256,829.

This wording is similar to paragraph [0015] of the later regular filing. Applicants understand this to mean that membership of the VLANs is made by applying policies to traffic, these policies being configured or adapted to this job. The statement that *VLAN membership is detected by a function within the switch called Source Learning* refers to the way that databases are examined to find out the VLAN membership:

Currently AutoTracker and VAP maintain separate databases containing MAC addresses of devices and their VLAN membership attributes. AutoTracker and VAP databases are updated real-time, so that forwarding of all traffic is based on the most recent information. The user has the option to disable the exchange of VLAN information (using VAP), and still have the auto-discovery capability active.

As noted, VAP exchanges MAC-based VlAN membership information between switches; therefore, all groups and AutoTracker VLAN configurations should be consistent across switches. The AutoTracker VLAN and Group information exchanged can reflect information not active in any particular switch. For instance VLANs or Groups can be configured but are not necessarily active because there are no endstations active in that VLAN. Page 1, paragraphs 3 and 4 of 60/256,829.

Each OmniSwitch and PizzaSwitch maintains an AutoTracker related database, which is built up by the configured AutoTracker policies and observed traffic. The VAP protocol reads the AutoTracker database within the OmniSwitch and advertises these entries to other OmniSwitches and PizzaSwitches. VAP generates advertisement frames on regular intervals and transmits the protocol over the switched network with all new entries that the switch has learned. Page 2, last paragraph of 60/256,829.

The learning process is carried out by "Autotracker" as explained in the first and second full paragraphs on page 2 of 60/256,829:

AutoTracker will flood the first frame of an unknown source MAC. Flooding allows devices to find connectivity to other devices, and VLAN membership to be learned by switches. Without VAP, loss of connectivity could occur. This is possible when one or more devices in the network times out, the VLAN flooding domain is reduced to not include once included switches. In a network without VAP, there is no way to recover it unless a device starts communicating again. VAP allows all switches to learn that other switches have devices in common VLANs, so proper flooding and connectivity can occur.

AutoTracker internally stores VLAN membership using a 32-bit mask. Therefore any exchange of information will include the MAC address, the 32-bit mask, and the Group identifier.

Applicants understand from the first sentence of the first paragraph that Autotracker floods the first frame of an unknown source MAC in such a way that the other switches will receive the frame and from this the information from other switches can be obtained via the use of VAP.

How this is done is described in detail on page 15:

To understand the impact of each of these options, we must first discuss the port policies within AutoTracker. There are two types of port policies that the OmniSwitch and PizzaSwitch support. Both types are mutually exclusive, which means that if one is enabled, the other is disabled, therefore both cannot be enabled at the same time. The user can configure port policies (with a single user interface command), and depending on which type is enabled, the operation of the VLANs will be very different. The user must be aware of this distinction.

One of the types is called the "regular port rules," where any frames received from the specified port will become members of the VLAN. The second is called "port forwarding rules," where the port policy is not used upon frame receipt to determine VLAN

membership, but instead is used on frame transmission for forwarding of broadcast, multicast, and unknown unicast traffic. The default of the switch is port forwarding policies. This can be overridden by entering the command "reg_port_rule=1" in the mpm.cmd file.

The first paragraph explains that Autotracker operates by port policies. This is consistent with the second paragraph of 60/256,829 which states as mentioned above:

Membership in VLANs is determined by applying policy to specific traffic.....

Also two types of policy are described. In "regular" Autotracker assigns the frames to a VLAN. We submit that this not the same as is recited in claim 20 for example :
- receiving at least one tagged frame from a CE device at each CE interface allocated to said VPN, and learning a correspondence between said CE interface and each VLAN identifier included in said at least one tagged frame.

Assigning frames to a VLAN is not the same as learning a correspondence.

The second policy is called "port forwarding rules," where the port policy is not used upon frame receipt to determine VLAN membership, but instead is used on frame transmission for forwarding of broadcast, multicast, and unknown unicast traffic.

Accordingly, this second rule (there are only two rules) forwards the frame without any learning activity being performed. This is consistent with the first full paragraph on page 2 where it states:

AutoTracker will flood the first frame of an unknown source MAC.

In other words, Autotracker forwards the frame by flooding to other switches and by this procedure eventually VAP will propagate the learned information back.

However such a forwarding and flooding to other switches does not learn a relationship between the endstation and the switch to which it is connected, but instead it allows propagation across the backbone of such information. In accordance with the present application:

[0055] When the frame is received at a local CE port (yes in tests 30 and 31), the corresponding VPN-id is retrieved in step 32 based on the configuration of the port number, and the VLAN identifier is read in the tag header of the frame in step 33. If table T contains no other local port number and no VC label for forwarding the frame (no in tests 34 and 35), then the frame is propagated to all the other PE devices in step 36 by pushing the labels of the flooding LSPs previously established.

This procedure is similar to the forwarding and flooding operation defined in the second rule of Autotracker.

In addition the present application in the paragraph bridging pages 9 and 10 states:

In this step 36, the frame is also propagated to any other local CE port of the PE device which has been configured for the VPN-id retrieved in step 32.

This step is not included in the second rule of Autotracker and yet it is this step that allows the local learning of the VLAN relationship between the endstation and the switch to which it is connected.

Accordingly, the priority document 60/256,829 of Goodwin is restricted by the above paragraphs such that it does not disclose or enable in any reasonable form the step of claim 20:

- *receiving at least one tagged frame from a CE device at each CE interface allocated to said VPN, and learning a correspondence between said CE interface and each VLAN identifier included in said at least one tagged frame.*

It is remarkable that there is no equivalent of the paragraphs mentioned above from page 15 of 60/256,829 in the non-provisional patent application of Goodwin.

Thus Goodwin took the priority provisional application 60/256,829, amplified its contents, added significant text and drawings and removed the restrictive paragraphs on page 15 to thereby present a broader invention than was disclosed in its priority provisional application.

Due to this broadening of subject matter, the BPAI therefore concluded of Goodwin:

This clearly demonstrates that Goodwin learns the correspondences between CE devices and VLAN s ....

Such a conclusion would not have been possible if the BPAI had considered the disclosure of 60/256,829.

Goodwin simply does not disclose the claimed feature: *learning of VLAN membership of an endstation to its connecting switch.*

In particular, Goodwin does not provide an enabling disclosure of this feature. Evidence for this can be found in the priority provisional application 60/256,829.

As recited in paragraph 0015 of Goodwin:

[0015] Membership in VLANs in the exemplary embodiment may be determined by applying policy to a specific traffic, and the policies may be configured. VLAN membership may be detected by a function within the switch called source learning (e.g., L2 source learning). The source learning function may apply the VLAN policies during processing of all unknown unicast, broadcast, and multicast frames.

Further:

[0026] Each switch in an exemplary embodiment may maintain a source learning related database, which is built up by the configured source learning policies and observed traffic.

To provide an adequate enabling disclosure Goodwin must explain in reasonable detail what such a configured policy is that is applied to specific traffic and especially to unknown unicast, broadcast and multicast frames that would be capable of obtaining the claimed feature of claim 20 of the present application, namely:

- receiving at least one tagged frame from a CE device at each CE interface allocated to said VPN, and learning a correspondence between said CE interface and each VLAN identifier included in said at least one tagged frame.

In other words it is necessary for Goodwin to explain how this policy is configured in sufficient detail for it to be an enabling disclosure.

Examples of what the skilled person would expect of such a policy are found on page 15 of the Goodwin priority provisional application:

To understand the impact of each of these options, we must first discuss the port policies within AutoTracker. There are two types of port policies that the OmniSwitch and PizzaSwitch support. Both types are mutually exclusive, which means that if one is enabled, the other is disabled, therefore both cannot be enabled at the same time. The user can configure port policies (with a single user interface command), and depending on which type is enabled, the operation of the VLANs will be very different. The user must be aware of this distinction.

One of the types is called the "regular port rules," where any frames received from the specified port will become members of the VLAN. The second is called "port forwarding rules," where the port policy is not used upon frame receipt to determine VLAN

membership, but instead is used on frame transmission for forwarding of broadcast, multicast, and unknown unicast traffic. The default of the switch is port forwarding policies. This can be overridden by entering the command "reg_port_rule=1" in the mpm.cmd file.

In distinction, the present application does recite in adequate detail such a policy in the above-quoted paragraph bridging pages 9 and 10, which for convenience has one sentence repeated:

In this step 36, the frame is also propagated to any other local CE port of the PE device which has been configured for the VPN-id retrieved in step 32.

Goodwin states:

[0020] The source learning function may flood the first frame of an unknown source MAC. Flooding allows devices to find connectivity to other devices, and VLAN membership to be learned by switches.

From the analysis above that this means that any such frame is forwarded to other switches and that this phrase does not disclose the propagation of the frame to any other local CE port of the PE device, i.e. it does not disclose the relevant feature of claim 20.

One also learns from Goodwin that:

[0028] While the source learning function is inspecting traffic regularly, VAP is exchanging information.

Thus one knows that the exchange of information, e.g. about VLAN membership is the job of VAP and not the source learning function which is inspecting traffic.

One also learns:

[0044] When an endstation sends a frame to the coupled switch, a policy match is performed and the endstation is placed in a VLAN. Thus, those ports may be mapped to the VLAN dynamically based on traffic patterns. However, the VLANs and VLAN membership are statically provisioned through the backbone ports of the network 184. Across these backbone ports, the switches 182 and 186 advertise the maps on the edges to each other.

As indicated above, assigning an endstation to a VLAN is not the same as learning a correspondence. The VLAN membership is statically not dynamically provisioned through the backbone.

In fact nowhere in Goodwin is there found an enabled written description of the configuration of a policy which by observing traffic obtains the feature:

- receiving at least one tagged frame from a CE device at each CE interface allocated to said VPN, and learning a correspondence between said CE interface and each VLAN.

In conclusion Goodwin makes no valid claim to priority and its relevant date is the filing date of the non-provisional application, which is December 19, 2001, and which post dates the foreign priority filing date of the present application which is December 7, 2001. The earlier foreign priority date of the present application means that the subject matter of Goodwin was not described in a printed publication before the invention thereof by the applicant for patent, nor was it described in a printed publication more than one year prior to the date of the application for patent in the United States (35 USC 102(a) and (b)). Hence Goodwin is not prior art with respect to the present application.

Finally it is necessary to show that:

Section 119 provides that a foreign application 'shall have the same effect' as if it had been filed in the United States. 35 U.S.C. § 119. Accordingly, ... the foreign priority application

must be examined to ascertain if it supports, within the meaning of section 112, ¶ 1, what is claimed in the United States application." *In re Gosteli*, 872 F.2d 1008 (Fed. Cir. 1989)

Priority filing EP 01403179.3 of the present application is substantially identical to the present application. In particular in the paragraph bridging pages 9 and 10 the exact method by which a local switch learns the VLAN information of an endstation connected to that switch is described in an identical manner to that in the present application.

Thus the claim to priority of the present application is fully supported.

It is therefore submitted that the priority of the present application to EP 01403179.3, filed December 7, 2001 is supported and Goodwin US 2002/0124107 is entitled to only its filing date of December 19, 2001. The present application therefore predates Goodwin, and Goodwin is not a proper reference.

Further and favorable reconsideration of the present application is therefore urged.

December 27, 2010

Respectfully submitted,

William M. Lee

William M. Lee, Jr.
Registration No. 26,935
Barnes & Thornburg
P.O. Box 2786
Chicago, Illinois 60690-2786
(312) 214-4800
(312) 759-5646 (fax)

CHDS01 WLEE 654653v1